BRUHAT BENGALURU MAHANAGARA PALIKE

Yelahanka Division

DETAILED MEASUREMENTS

Name of the Package:

Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO-12)

Agency: Sri. Srinivasa Reddy H

PMC: Sapience Consultants and Engineers

A.E: Sri. Ramakrishnaiah

A.E.E.: Sri. Sachin

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	8
Item Name:	Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH Chapter 3 (PW,P& IWTD SR 2018-19, Pg No 143 Item No.19.1) Rates Including Loading and Unloading Charges and Lead up to 15.00 Kms)
Final Measurement Date(s) :	16/05/2022; 17/05/2022; 21/05/2022; 23/05/2022; 25/05/2022; 30/05/2022; 08/06/2022; 11/06/2022; 13/06/2022;

Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
E/W Excavation for New RCC Drains and Culverts									
Adithya Nagara									
3rd Main from Chikkabettahalli Road to End of Road (LHS)									
0.00	24.00	1	24.00	0.95		0.95	0.60	13.68	New Drain
24.00	28.40	1	4.40						Culvert
28.40	53.20	1	24.80	0.95		0.95	0.90	21.20	New Drain
53.20	57.50	1	4.30						Culvert
57.50	82.60	1	25.10	0.95		0.95	0.90	21.46	New Drain
82.60	87.20	1	4.60						Culvert
87.20	111.80	1	24.60	0.95		0.95	0.90	21.03	New Drain
3rd main from chikkabettahalli road to end of road (RHS)									
0.00	12.60	1	12.60						No Drain
12.60	25.40	1	12.80	0.95		0.95	0.60	7.30	Only Desilt
25.40	29.80	1	4.40						Culvert 3rd 'A' Crs
29.80	62.60	1	32.80	0.95		0.95	0.90	28.04	New Drain
62.60	66.40	1	3.80						Culvert 3rd 'B' Crs
66.40	93.20	1	26.80	0.95		0.95	0.90	22.91	New Drain

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Chainage Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
0.00	30.00	1	30.00	1.10		1.10	0.90	29.70	
30.00	60.00	1	30.00	1.10		1.10	0.90	29.70	
60.00	85.00	1	25.00	1.10		1.10	0.90	24.75	
85.00	87.70	1	2.70	1.10		1.10	0.90	2.67	
87.70	88.90	1	1.20						Culvert
3rd' B' cross Road from 3rd Main to End of Road - RHS									
0.00	30.00	1	30.00	0.80		0.80	0.90	21.60	
30.00	60.00	1	30.00	0.80		0.80	0.90	21.60	
60.00	85.00	1	25.00	0.80		0.80	0.90	18.00	
85.00	87.70	1	2.70	0.80		0.80	0.90	1.94	
87.70	88.90	1	1.20						Culvert
88.90	95.80	1	6.90						HT Cross Road
95.80	120.00	1	24.20	0.80		0.80	0.90	17.42	
120.00	150.00	1	30.00	0.80		0.80	0.90	21.60	
150.00	180.00	1	30.00	0.80		0.80	0.90	21.60	
180.00	211.80	1	31.80	0.80		0.80	0.90	22.90	
22nd Main Road from 3rd Main Road to HT Cross Road (LHS)									
0.0	30.0	1	30.00	0.95		0.95	0.90	25.65	
30.0	60.0	1	30.00	0.95		0.95	0.50	14.25	
60.0	76.9	1	16.90	0.95		0.95	0.50	8.03	
22nd Main Road from 3rd Main Road to HT Cross Road (RHS)									
0.0	30.0	1	30.00	0.95		0.95	0.90	25.65	
30.0	60.0	1	30.00	0.95		0.95	0.90	25.65	
60.0	83.5	1	23.50	0.95		0.95	0.90	20.09	
HT Cross Road from 3rd 'A' Cross Road to 3rd 'B' Cross Road - LHS									
0.0	22.5	1	22.50	0.95		0.95	0.90	19.24	
HT Cross Road from 3rd 'A' Cross Road to 3rd 'B' Cross Road - RHS									
0.0	22.5	1	22.50	0.95		0.95	0.90	19.24	
HT Cross Road from 3rd 'B' Cross Road to 22nd Main Road - LHS									
0.0	14.0	1	14.00	0.70		0.70	0.90	8.82	
HT Cross Road from 22nd Main Road to Masjid-E-Abbasiya - LHS									
0.0	15.0	1	15.00						No Work
15.0	32.8	1	17.80	0.60		0.60	0.50	5.34	
32.8	40.0	1	7.20						ONLY DESILT
40.0	65.0	1	25.00	0.60		0.60	0.50	7.50	

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Chainage Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
73.80	102.80	1	29.00	1.10		1.10	0.90	28.71	
102.80	110.60	1	7.80						Culvert
110.60	139.80	1	29.20	1.10		1.10	0.90	28.91	
139.80	147.80	1	8.00						Culvert
147.80	176.30	1	28.50	1.10		1.10	0.90	28.22	
176.30	184.90	1	8.60						Culvert
184.90	210.80	1	25.90	1.10		1.10	0.90	25.64	
210.80	218.00	1	7.20						Culvert
218.00	244.20	1	26.20	1.10		1.10	0.90	25.94	
244.20	251.00	1	6.80						Culvert
2nd Main Road (Kempegowda Road) from Bylakere-Atturu Road - RHS									
0.00	30.00	1	30.00	1.10		1.10	0.90	29.70	
30.00	60.00	1	30.00	1.10		1.10	0.90	29.70	
60.00	92.90	1	32.90	1.10		1.10	0.90	32.57	
92.90	106.40	1	13.50						# 299, No Work
106.40	120.00	1	13.60	1.10		1.10	0.90	13.46	
120.00	140.20	1	20.20	1.10		1.10	0.90	20.00	
140.20	150.40	1	10.20						Temple, No Work
150.40	180.00	1	29.60	1.10		1.10	0.90	29.30	
180.00	210.00	1	30.00	1.10		1.10	0.90	29.70	
210.00	240.00	1	30.00	1.10		1.10	0.90	29.70	
240.00	250.70	1	10.70	1.10		1.10	0.90	10.59	
Culverts in Kempegowdanagara									
Culvert at Ch: 0.00		1	7.20	0.60		0.60	0.50	2.16	Only Desilt
LHS Culvert at Ch: 102.80		1	7.80	1.20		1.20	0.80	7.49	
LHS Culvert at Ch: 139.80		1	8.00	1.20		1.20	0.80	7.68	
LHS Culvert at Ch: 176.30		1	8.60	1.20		1.20	0.80	8.26	
LHS Culvert at Ch: 210.80		1	7.20	1.20		1.20	0.80	6.91	
A.V.S Jayamadhur Apartment to Dhanush Apartment Road									
0.00	19.50	1	19.50	1.10		1.10	0.90	19.31	AVS jayamadhur
19.50	30.00	1	10.50	1.10		1.10	0.90	10.40	
30.00	60.00	1	30.00	1.10		1.10	0.90	29.70	
60.00	90.00	1	30.00	1.10		1.10	0.90	29.70	
90.00	98.70	1	8.70	1.10		1.10	0.90	8.61	Dhanush Apts

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Chainage		Nos	L	B	B1	Avg B	D	Qty	REMARKS
Land Mark			(m)	(m)	(m)	(m)	(m)		
Kanshi Ram Nagara 1st Main Road - LHS									
0.00	32.40	1	32.40	1.10		1.10	0.90	32.08	
0.00	22.70	1	22.70	1.10		1.10	0.90	22.47	Left Cross LHS
0.00	9.40	1	9.40	1.10		1.10	0.90	9.31	Left Cross RHS
0.00	24.10	1	24.10	1.10		1.10	0.90	23.86	Left Side LHS
0.00	24.10	1	24.10	1.10		1.10	0.90	23.86	Left Side RHS
Kanshi Ram Nagara 1st Main Road - RHS									
0.00	32.40	1	32.40						No Work
0.00	10.70	1	10.70	1.10		1.10	0.90	10.59	Right Side RHS
0.00	30.00	1	30.00	1.10		1.10	0.90	29.70	Right Side RHS
30.00	40.00	1	10.00	1.10		1.10	0.90	9.90	Right Side RHS
0.00	16.50	1	16.50	1.10		1.10	0.90	16.34	Right Side LHS
Hesaraghatta Main Road from Kanshi Ram Nagara 1st Main LHS									
0.00	30.00	1	30.00	1.10		1.10	0.90	29.70	
30.00	60.00	1	30.00	1.10		1.10	0.90	29.70	
60.00	64.50	1	4.50	1.10		1.10	0.90	4.46	
							Total Qty	**1972.11**	**CUM**
							Qty Payable in this bill	**1972.11**	**CUM**

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

Name of Work: Restoration and Improvements of Roads From Doddaballa...

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	7
Item Name:	KSRB 4-1.3 : Providing and laying in position plain cement concrete ofg Mix 1:4:8 with opc @180kgs, with 40mm and down size graded granite metal coarse aggregates@0.85 cum and fine aggregates @0.57 cum machine mixed , machine mixed, concrete laid in layers mot exceeding 15cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per Specifications. Specifications No. KBS 4.1 , 4.2 ,Pg No 30
Final Measurement Date(s) :	**18/05/2022; 19/05/2022; 23/05/2022; 24/05/2022; 27/05/2022; 01/06/2022; 10/06/2022; 13/06/2022; 15/06/2022; 16/06/2022;**

Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Bed Concrete for New RCC Drains and Culverts									
Adithya Nagara									
3rd Main from Chikkabettahalli Road to End of Road (LHS)									
0.00	24.00	1	24.00	0.95		0.95	0.15	3.42	New Drain
24.00	28.40	1	4.40						Culvert
28.40	53.20	1	24.80	0.95		0.95	0.15	3.53	New Drain
53.20	57.50	1	4.30						Culvert
57.50	82.60	1	25.10	0.95		0.95	0.15	3.58	New Drain
82.60	87.20	1	4.60						Culvert
87.20	111.80	1	24.60	0.95		0.95	0.15	3.51	New Drain
3rd main from chikkabettahalli road to end of road (RHS)									
0.00	12.60	1	12.60						No Drain
12.60	25.40	1	12.80	0.95		0.95	0.15	1.82	Only Desilt
25.40	29.80	1	4.40						Culvert 3rd 'A' Crs
29.80	62.60	1	32.80	0.95		0.95	0.15	4.67	New Drain
62.60	66.40	1	3.80						Culvert 3rd 'B' Crs
66.40	93.20	1	26.80	0.95		0.95	0.15	3.82	New Drain

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Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Hesaraghatta Main Road from Kanshi Ram Nagara 1st Main LHS									
	0.00	30.00	1	30.00	1.10		1.10	0.15	4.95
	30.00	60.00	1	30.00	1.10		1.10	0.15	4.95
	60.00	64.50	1	4.50	1.10		1.10	0.15	0.74
								Total Qty	331.74 CUM
								Qty Payable in this bill	331.74 CUM

Contractor Representative

SAPHIRE CONSULTANTS & ENGINEERS Bangalore-59

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO-12)

Measurement Sheet

FOURTH and PART

Item No:	10
Item Name:	KSRRB M 2200-6 Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. MORTH Specification No 1600 & 2200 TMT Bars Fe 500 Page No 229 Item No 28.8.2 SR 2018-19
Final Measurement Date(s) :	**20/05/2022; 21/05/2022; 23/05/2022; 25/05/2022; 27/05/2022; 28/05/2022; 03/06/2022; 06/06/2022; 08/06/2022; 10/06/2022; 15/06/2022; 16/06/2022; 18/06/2022; 20/06/2022; 21/06/2022**

Sl No	Dia of Bar in mm	Mat	Spacing of Bar	Nos	Length of Bar in mtr	Total Length of Bar in mtr	Type of Bar	Standard Weight per Meter in	Weight of Steel in kgs	Remarks
Single Mat for Drain										
Adithya Nagara										
3rd Main from Chikkabettahalli Road to End of Road (LHS)										
1	8	2	225mm C/C	9	98.50	1751.11	Distri	0.395	691.80	
2	10	2	225mm C/C	438	2.00	1751.11	Main	0.617	1080.93	
3rd main from chikkabettahalli road to end of road (RHS)										
1	8	2	225mm C/C	9	72.40	1287.11	Distri	0.395	508.49	
2	10	2	225mm C/C	322	2.00	1287.11	Main	0.617	794.51	
3rd 'A' cross Road from 3rd main Road to 14th main 1st phase - **LHS**										
1	8	2	225mm C/C	9	294.80	5240.89	Distri	0.395	2070.48	
2	10	2	225mm C/C	1310	2.00	5240.89	Main	0.617	3235.12	
3rd 'A' cross Road from 3rd main Road to 14th main 1st phase - **RHS**										
CH from 0.00 to 25.00										
1	8	2	225mm C/C	9	25.00	444.44	Distri	0.395	175.58	
2	10	2	225mm C/C	111	2.00	444.44	Main	0.617	274.35	
CH from 26.80 to 105.20										
1	8	1	150mm C/C	12	78.40	914.67	Distri	0.395	361.35	
2	10	1	150mm C/C	523	1.75	914.67	Main	0.617	564.61	
CH from 106.40 to 328.30										
1	8	2	225mm C/C	9	221.90	3944.89	Distri	0.395	1558.48	
2	10	2	225mm C/C	986	2.00	3944.89	Main	0.617	2435.12	

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SUPERVISION CONSULTANTS & ENGINEERS * Bangalore-59

Sl No	Dia of Bar in mm	Mat	Spacing of Bar	Nos	Length of Bar in mtr	Total Length of Bar in mtr	Type of Bar	Standard Weight per Meter in	Weight of Steel in kgs	Remarks
LHS Culvert at Ch: 140.20										
1	10	2	175mm C/C	12	7.90	183.28	Distri	0.617	113.14	
2	12	2	200mm C/C	40	2.03	160.37	Main	0.889	142.55	
LHS Culvert at Ch: 176.60										
1	10	2	175mm C/C	12	8.30	192.56	Distri	0.617	118.86	
2	12	2	200mm C/C	42	2.03	168.49	Main	0.889	149.77	
LHS Culvert at Ch: 210.80										
1	10	2	175mm C/C	12	7.40	171.68	Distri	0.617	105.98	
2	12	2	200mm C/C	37	2.03	150.22	Main	0.889	133.53	
A.V.S Jayamadhur Apartment to Dhanush Apartment Road										
A.V.S Jayamadhur apartment to A.V.S appartment										
1		2	225mm C/C	9	98.70	1754.67	Distri	0.395	693.20	
2		2	225mm C/C	439	2.00	1754.67	Main	0.617	1083.13	
KANSHI RAM NAGARA										
Kanshi Ram Nagara 1st Main Road - LHS										
1	8	2	225mm C/C	9	112.70	2003.56	Distri	0.395	791.53	
2	10	2	225mm C/C	501	2.00	2003.56	Main	0.617	1236.77	
Kanshi Ram Nagara 1st Main Road - RHS										
1	8	2	225mm C/C	9	99.60	1770.67	Distri	0.395	699.52	
2	10	2	225mm C/C	443	2.00	1770.67	Main	0.617	1093.01	
Hesaraghatta Main Road from Kanshi Ram Nagara 1st Main LHS										
1	8	2	225mm C/C	9	64.50	1146.67	Distri	0.395	453.01	
2	10	2	225mm C/C	287	2.00	1146.67	Main	0.617	707.82	
								Total Quantity of Steel in Kg's	**39401.95**	**Kgs**
								Total Quantity of Steel in Tonne's	**39.4020**	**TONNE**

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	9
Item Name:	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specifications. Wall and Bottom Thickness 15 cm , Item No.37.59.2, Page No.271.-
Final Measurement Date(s) :	**23/05/2022; 24/05/2022; 25/05/2022; 27/05/2022; 28/05/2022; 01/06/2022; 02/06/2022; 03/06/2022; 06/06/2022; 08/06/2022; 09/06/2022; 10/06/2022; 13/06/2022; 15/06/2022; 16/06/2022; 17/06/2022; 18/06/2022; 20/06/2022; 21/06/2022**

Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Raft Concrete for New RCC Drains and Culverts									
Adithya Nagara									
3rd Main from Chikkabettahalli Road to End of Road (LHS)									
0.00	24.00	1	24.00	0.75		0.75	0.15	2.70	New Drain
24.00	28.40	1	4.40						Culvert
28.40	53.20	1	24.80	0.75		0.75	0.15	2.79	New Drain
53.20	57.50	1	4.30						Culvert
57.50	82.60	1	25.10	0.75		0.75	0.15	2.82	New Drain
82.60	87.20	1	4.60						Culvert
87.20	111.80	1	24.60	0.75		0.75	0.15	2.77	New Drain
3rd main from chikkabettahalli road to end of road (RHS)									
0.00	12.60	1	12.60						No Drain
12.60	25.40	1	12.80	0.75		0.75	0.15	1.44	Only Desilt
25.40	29.80	1	4.40						Culvert 3rd 'A' Crs
29.80	62.60	1	32.80	0.75		0.75	0.15	3.69	New Drain
62.60	66.40	1	3.80						Culvert 3rd 'B' Crs
66.40	93.20	1	26.80	0.75		0.75	0.15	3.02	New Drain

SAPIENCE CONSULTANTS ENGINEERS

Chowdappa Layout,Maruthinagara,Hariraja Layout and surrounding

Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Hesaraghatta Main Road from Kanshi Ram Nagara 1st Main LHS									
0.00	30.00	2	30.00	0.15		0.15	0.60	5.40	
30.00	60.00	2	30.00	0.15		0.15	0.60	5.40	
60.00	64.50	2	4.50	0.15		0.15	0.60	0.81	
							Total Qty	627.56	CUM
							Qty Payable in this bill	627.56	CUM

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

Chowdappa Layout,Maruthinagara,Hariraja Layout and surrounding areas in ward

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	11
Item Name:	Providing and Fixing pre cast covering Slab of 100mm thick made out of CC jelly 20mm and down size with steel reinforecement , inclunding form work, lift charges, curing including cost of all materials ,Labour,Hire charges of machineries,loading onloading,lead and lift, Transportation etc,complete. as per Engineer in-charge.(Date Rate)

Final Measurement Date(s) : 27/06/2022; 29/06/2022; 02/07/2022

Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
RCC Pre - Cast Drain Covering Slabs									
Adithya Nagara									
3rd Main from Chikkabettahalli Road to End of Road (LHS)									
0.00	10.60	1	10.60	0.75		0.75		7.95	
10.60	15.40	1	4.80						House Gate
15.40	24.00	1	8.60	0.75		0.75		6.45	
24.00	28.40	1	4.40						Culvert
28.40	40.80	1	12.40						BS Slabs
40.80	53.20	1	12.40	0.75		0.75		9.30	
53.20	57.50	1	4.30						Culvert
57.50	61.70	1	4.20						BS Slabs
61.70	82.60	1	20.90	0.75		0.75		15.68	
82.60	87.20	1	4.60						Culvert
87.20	91.60	1	4.40						CC Ramp
91.60	111.80	1	20.20	0.75		0.75		15.15	
3rd Main from chikkabettahalli road to end of road (RHS)									
0.00	12.60	1	12.60						No Drain
12.60	25.40	1	12.80	0.75		0.75		9.60	
25.40	29.80	1	4.40						Culvert
29.80	34.40	1	4.60						BS Slabs
34.40	62.60	1	28.20	0.75		0.75		21.15	
62.60	66.40	1	3.80						Culvert
66.40	67.70	1	1.30						BS Slabs
67.70	77.50	1	9.80	0.75		0.75		7.35	
77.50	79.30	1	1.80	0.75		0.75		1.35	
79.30	93.20	1	13.90	0.75		0.75		10.43	

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SAFENCE CONSULTANTS & ENGINEERS Bangalore

Chainage		Nos	L	B	B1	Avg B	D	Qty	REMARKS
Land Mark			(m)	(m)	(m)	(m)	(m)		
3rd 'A' cross Road from 3rd main Road to 14th main 1st phase - LHS									
0.00	26.80	1	26.80						
26.80	30.00	1	3.20	0.75		0.75		2.40	No Drain
30.00	80.00	1	50.00	0.75		0.75		37.50	
80.00	90.00	1	10.00	0.75		0.75		7.50	
90.00	105.20	1	15.20	0.75		0.75		11.40	
105.20	113.00	1	7.80						
113.00	131.80	1	18.80	0.75		0.75		14.10	No Drain
131.80	140.40	1	8.60						
140.40	164.10	1	23.70	0.75		0.75		17.78	BS Slabs
164.10	168.40	1	4.30						
168.40	180.00	1	11.60	0.75		0.75		8.70	CC Ramp
180.00	210.00	1	30.00	0.75		0.75		22.50	
210.00	231.60	1	21.60	0.75		0.75		16.20	
231.60	233.90	1	2.30						
233.90	250.30	1	16.40	0.75		0.75		12.30	BS Slabs
250.30	256.20	1	5.90						
256.20	263.60	1	7.40	0.75		0.75		5.55	BS Slabs
263.60	268.90	1	5.30						
268.90	275.10	1	6.20	0.75		0.75		4.65	BS Slabs
275.10	279.30	1	4.20						
279.30	286.80	1	7.50	0.75		0.75		5.63	BS Slabs
286.80	288.20	1	1.40						
288.20	300.00	1	11.80	0.75		0.75		8.85	BS Slabs
300.00	329.40	1	29.40	0.75		0.75		22.05	
3rd 'A' cross Road from 3rd main Road to 14th main 1st phase - RHS									
0.00	11.70	1	11.70	0.75		0.75		8.78	
11.70	14.20	1	2.50						
14.20	17.80	1	3.60	0.75		0.75		2.70	House Gate
17.80	20.10	1	2.30						
20.10	25.00	1	4.90	0.75		0.75		3.68	House Gate
25.00	26.80	1	1.80						
26.80	30.00	1	3.20	0.75		0.75		2.40	Culvert
30.00	60.00	1	30.00	0.75		0.75		22.50	
60.00	90.00	1	30.00	0.75		0.75		22.50	
90.00	105.20	1	15.20	0.75		0.75		11.40	

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Chainage Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
105.20	107.00	1	1.80						Culvert
107.00	113.00	1	6.00						HT Cross Road
113.00	120.90	1	7.90	0.75		0.75		5.93	
120.90	132.80	1	11.90						BS Slabs
132.80	138.60	1	5.80	0.75		0.75		4.35	
138.60	140.60	1	2.00						BS Slabs
140.60	150.00	1	9.40	0.75		0.75		7.05	
150.00	180.00	1	30.00	0.75		0.75		22.50	
180.00	210.00	1	30.00	0.75		0.75		22.50	
210.00	240.00	1	30.00	0.75		0.75		22.50	
240.00	270.00	1	30.00	0.75		0.75		22.50	
270.00	300.00	1	30.00	0.75		0.75		22.50	
300.00	328.30	1	28.30	0.75		0.75		21.23	
3rd' B' cross Road from 3rd Main to End of Road - LHS									
0.00	30.00	1	30.00	0.90		0.90		27.00	
30.00	44.50	1	14.50	0.90		0.90		13.05	
44.50	46.50	1	2.00						House gate
46.50	66.20	1	19.70	0.90		0.90		17.73	
66.20	73.60	1	7.40						BS Slab
73.60	87.70	1	14.10	0.90		0.90		12.69	
87.70	88.90	1	1.20						Culvert
3rd' B' cross Road from 3rd Main to End of Road - RHS									
0.00	30.00	1	30.00	0.60		0.60		18.00	
30.00	49.00	1	19.00	0.60		0.60		11.40	
49.00	58.50	1	9.50	0.60		0.60		5.70	BS Slab
58.50	87.70	1	29.20	0.60		0.60		17.52	
87.70	88.90	1	1.20						Culvert
88.90	95.80	1	6.90						HT Cross Road
95.80	125.00	1	29.20	0.60		0.60		17.52	
125.00	153.50	1	28.50	0.60		0.60		17.10	
153.50	180.00	1	26.50						BS Slab
180.00	211.80	1	31.80	0.60		0.60		19.08	
22nd Main Road from 3rd Main Road to HT Cross Road (LHS)									
0.0	30.0	1	30.00	0.75		0.75		22.50	
30.0	60.0	1	30.00	0.75		0.75		22.50	
60.0	76.9	1	16.90	0.75		0.75		12.68	

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Chainage / Land Mark			Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Hesaraghatta Main Road from Kanshi Ram Nagara 1st Main LHS										
	0.00	30.00	1	30.00	0.90		0.90		27.00	
	30.00	60.00	1	30.00	0.90		0.90		27.00	
	60.00	64.50	1	4.50	0.90		0.90		4.05	
								Total Qty	1568.55	CUM
								Qty Payable in this bill	1568.55	CUM

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	12
Item Name:	Providing and fixing RCC precast cover slab of 230mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge (Data Rate)

Final Measurement Date(s) : 27/06/2022; 29/06/2022; 02/07/2022

Chainage / Land Mark	Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
230mm RCC Pre - Cast Culvert Covering Slabs								
Adithya Nagara								
Culverts on 3rd Main Road								
Culvert at Ch: 0.00	1	4.20	1.20		1.20		5.04	
Culvert at Ch: 24.0	1	3.70	1.20		1.20		4.44	
LHS Culvert at Ch: 24.0	1	4.00	1.20		1.20		4.80	
LHS Culvert at Ch: 53.2	1	4.20	1.20		1.20		5.04	
LHS Culvert at Ch: 82.6	1	4.60	1.20		1.20		5.52	
Culverts on 3rd 'A' Cross Road								
Culvert at Ch: 328.3	1	4.20	1.20		1.20		5.04	
Culverts on 3rd 'B' Cross Road								
Culvert at Ch: 87.7	1	9.00	1.20		1.20		10.80	
Culvert at Ch: 87.7	1	3.60	1.20		1.20		4.32	
Culvert at Ch: 95.8	1	4.10	1.20		1.20		4.92	
Culverts on HT (High Tension) Cross Road								
Culvert at Ch: 64.0	1	6.40	1.20		1.20		7.68	
Cross Culvert on HT Cross Road at 22nd Main Road								
	1	10.20	1.20		1.20		12.24	

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SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

Chainage / Land Mark	Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
KEMPEGOWDA NAGARA								
Culverts in Kempegowdanagara								
LHS Culvert at Ch: 102.80	1	7.80	1.20		1.20		9.36	
LHS Culvert at Ch: 140.20	1	7.90	1.20		1.20		9.48	
LHS Culvert at Ch: 176.60	1	8.30	1.20		1.20		9.96	
LHS Culvert at Ch: 210.80	1	7.40	1.20		1.20		8.88	
						Total Qty	107.52	CUM
						Total BOQ Quantity	67.20	CUM
						Quantity Paid up to THIRD Part Bill	30.12	CUM
						Quantity Reserved for Approval of Workslip and EIRL	70.44	CUM
						Quantity Payable in this Bill	37.08	CUM

Contractor Representative

Consultant Representative

Asst.Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	6
Item Name:	KSRB 4-1.6: Providing and laying in postion Plain cement concrete of Mix 1:2:4 with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 Page No-13, Item No-4.6.,(PWD BCSR 2018-19)

Final Measurement Date(s) : 05/07/2022; 07/07/2022

Chainage / Land Mark	Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Packing Concrete for KERBS								
Adithya Nagara								
22nd Main Road from 3rd Main Road to HT Cross Road (LHS)								
0.0	30.0	1	30.00	0.20		0.20	0.10	0.60
30.0	60.0	1	30.00	0.20		0.20	0.10	0.60
60.0	76.9	1	16.90	0.20		0.20	0.10	0.34
22nd Main Road from 3rd Main Road to HT Cross Road (RHS)								
0.0	30.0	1	30.00	0.20		0.20	0.10	0.60
30.0	60.0	1	30.00	0.20		0.20	0.10	0.60
60.0	83.5	1	23.50	0.20		0.20	0.10	0.47
HT Cross Road from 22nd Main Road to Masjid-E-Abbasiya - RHS								
0.0	14.0	1	14.00					No Work
14.0	30.0	1	16.00	0.20		0.20	0.10	0.32
30.0	64.0	1	34.00	0.20		0.20	0.10	0.68
1 st left Cross Road from HT Cross Rroad to End of Road - LHS								
0.0	30.0	1	30.00	0.20		0.20	0.10	0.60
30.0	60.0	1	30.00	0.20		0.20	0.10	0.60
60.0	69.7	1	9.70	0.20		0.20	0.10	0.19
1 st left Cross Road from HT Cross Rroad to End of Road - RHS								
0.0	30.0	1	30.00	0.20		0.20	0.10	0.60
30.0	60.0	1	30.00	0.20		0.20	0.10	0.60
60.0	69.2	1	9.20	0.20		0.20	0.10	0.18

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SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

Chainage		Nos	L	B	B1	Avg B	D	Qty	REMARKS
Land Mark			(m)	(m)	(m)	(m)	(m)		
0.00	32.40	1	32.40						No Work
0.00	10.70	1	10.70	0.20		0.20	0.10	0.21	Right Side
0.00	30.00	1	30.00	0.20		0.20	0.10	0.60	Right Side
30.00	40.00	1	10.00	0.20		0.20	0.10	0.20	Right Side
0.00	16.50	1	16.50	0.20		0.20	0.10	0.33	Right Side
Hesaraghatta Main Road from Kanshi Ram Nagara 1st Main LHS									
0.00	30.00	1	30.00	0.20		0.20	0.10	0.60	
30.00	64.50	1	34.50	0.20		0.20	0.10	0.69	
							Total Quantity	20.38	CUM

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	13
Item Name:	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C 1:2:4 with top and bottom width 114 and 165 mm respectively , 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including form work, curing, including cost of all materials , labour,hire charges of machinery, loading, unloading, lead and lift, transportation ect , complete.I.No.-5.30,P.No-27 of PWD BCSR 2018-19 .

Final Measurement Date(s) : 05/07/2022; 07/07/2022

Chainage / Land Mark			Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Adithya Nagara										
HT Cross Road from 22nd Main Road to Masjid-E-Abbasiya - LHS										
	0.0	14.0	1	14.00						No Work
	14.0	31.8	1	17.80					17.80	New Drain
	31.8	39.0	1	7.20						Culvert
	39.0	64.0	1	25.00					25.00	New Drain
HT Cross Road from 22nd Main Road to Masjid-E-Abbasiya - RHS										
	0.0	14.0	1	14.00						
	14.0	30.0	1	16.00					16.00	
	30.0	64.0	1	34.00					34.00	
1 st left Cross Road from HT Cross Rroad to End of Road - LHS										
	0.0	30.0	1	30.00					30.00	
	30.0	60.0	1	30.00					30.00	
	60.0	69.7	1	9.70					9.70	
1 st left Cross Road from HT Cross Rroad to End of Road - RHS										
	0.0	30.0	1	30.00					30.00	
	30.0	60.0	1	30.00					30.00	
	60.0	69.2	1	9.20					9.20	

28/7/2022

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SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

Chainage Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
0.00	32.40	1	32.40						No Work
0.00	10.70	1	10.70					10.70	Right Side
0.00	30.00	1	30.00					30.00	Right Side
30.00	40.00	1	10.00					10.00	Right Side
0.00	16.50	1	16.50					16.50	Right Side
Hesaraghatta Main Road from Kanshi Ram Nagara 1st Main LHS									
0.00	30.00	1	30.00					30.00	
30.00	64.50	1	34.50					34.50	
							Total Length	901.40	Rmt
							Total Quantity (Total Length / 0.45 mtr)	2003.00	NO'S
							Qty Payable in this bill	2003.00	NO'S

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	1
Item Name:	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embarnkemnt location to a lead of 1.00 km and complete as per specifications MORTH Specification No.301 (I No-19.14,P No-143)

Final Measurement Date(s) : 06/07/2022; 08/07/2022; 11/07/2022

Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Earthwork for Road Formation									
Adithya Nagara									
3rd Main Road from Chikkabettahalli Road to End of Road									
0.00	24.00	1	24.00	4.10	3.70	3.90	0.30	28.08	
24.00	25.20	1	1.20						New Culvert
25.20	60.00	1	34.80	3.80	3.70	3.75	0.30	39.15	
60.00	83.80	1	23.80	3.70	2.50	3.10	0.30	22.13	
83.80	99.50	1	15.70	2.50	2.50	2.50	0.30	11.78	
99.50	115.40	1	15.90	3.00	3.10	3.05	0.30	14.55	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-5	0.45	0.45		0.45	0.30	-0.30	
MANHOLE (0.90 mtr Dia)		-4	3.14	0.45	0.45		0.30	-0.76	
1st left Cross Road from 3rd Main Road									
0.00	17.80	1	17.80	3.70	3.20	3.45	0.30	18.42	
2nd left Cross Road from 3rd Main Road									
0.00	17.90	1	17.90	4.00	3.70	3.85	0.30	20.67	
Deductions									
CHAMBER		-1	0.45	0.45		0.45	0.30	-0.18	
3rd left Cross Road from 3rd main									
0.00	14.80	1	14.80	4.10	3.50	3.80	0.30	16.87	
3rd 'A' cross Road from 3rd Main Road to 14th main 1st phase									
0.00	17.40	1	17.40	3.20	3.40	3.30	0.30	17.23	
17.40	24.50	1	7.10	3.20	3.00	3.10	0.30	6.60	
24.50	26.30	1	1.80						Culvert
26.30	60.00	1	33.70	3.70	3.60	3.65	0.30	36.90	
60.00	90.00	1	30.00	3.60	3.30	3.45	0.30	31.05	
90.00	105.20	1	15.20	3.30	3.40	3.35	0.30	15.28	
105.20	107.00	1	1.80						Culvert

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SAPIENCE CONSULTANTS & ENGINEERS

Chainage		Nos	L	B	B1	Avg B	D	Qty	REMARKS
Land Mark			(m)	(m)	(m)	(m)	(m)		
107.00	113.00	1	6.00						High Tension Cross Road
113.00	120.00	1	7.00	5.30	4.70	5.00	0.30	10.50	
120.00	150.00	1	30.00	4.70	4.20	4.45	0.30	40.05	
150.00	180.00	1	30.00	4.20	4.60	4.40	0.30	39.60	
180.00	210.00	1	30.00	4.60	4.10	4.35	0.30	39.15	
210.00	240.00	1	30.00	4.10	4.40	4.25	0.30	38.25	
240.00	270.00	1	30.00	4.40	3.20	3.80	0.30	34.20	
270.00	287.70	1	17.70	3.20	2.70	2.95	0.30	15.66	
287.70	300.00	1	12.30	3.80	2.30	3.05	0.30	11.25	
300.00	328.60	1	28.60	2.30	4.20	3.25	0.30	27.89	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-12	0.45	0.45		0.45	0.30	-0.73	
MANHOLE (0.90 mtr Dia)		-6	3.14	0.45	0.45		0.30	-1.14	
3rd' B' cross Road from 3rd main to end of Road									
0.00	30.00	1	30.00	3.70	3.50	3.60	0.30	32.40	
30.00	60.00	1	30.00	3.50	4.30	3.90	0.30	35.10	
60.00	87.70	1	27.70	4.30	4.10	4.20	0.30	34.90	
87.70	88.90	1	1.20						Culvert
88.90	95.80	1	6.90						HT Cross Road
95.80	120.00	1	24.20	3.60	3.80	3.70	0.30	26.86	
120.00	150.00	1	30.00	3.80	4.00	3.90	0.30	35.10	
150.00	180.00	1	30.00	4.00	3.30	3.65	0.30	32.85	
180.00	211.80	1	31.80	3.30	3.00	3.15	0.30	30.05	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-3	0.45	0.45		0.45	0.30	-0.18	
MANHOLE (0.90 mtr Dia)		-9	3.14	0.45	0.45		0.30	-1.72	
							Total Qty	757.51	CUM
							Total BOQ Quantity	5008.80	CUM
							Quantity Paid up to THIRD Part Bill	4705.64	CUM
							Quantity Reserved for Approval of Workslip and EIRL	454.35	CUM
							Quantity Payable in this Bill	303.16	CUM

Contractor Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

SAPIENS CONSULTANTS & ENGINEERS * Bangalore-59

Consultant Representative

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	2
Item Name:	KSRRB 300-58. Compaction of original ground by mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per specifications.(I No-19.64,P No-147)

Final Measurement Date(s) : 06/07/2022; 08/07/2022; 11/07/2022

Chainage / Land Mark			Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Adithya Nagara										
3rd Main Road from Chikkabettahalli Road to End of Road										
	0.00	24.00	1	24.00	4.10	3.70	3.90		93.60	
	24.00	25.20	1	1.20						New Culvert
	25.20	60.00	1	34.80	3.80	3.70	3.75		130.50	
	60.00	83.80	1	23.80	3.70	2.50	3.10		73.78	
	83.80	99.50	1	15.70	2.50	2.50	2.50		39.25	
	99.50	115.40	1	15.90	3.00	3.10	3.05		48.50	
Deductions										
CHAMBER (0.45 x 0.45 mtr)			-5	0.45	0.45		0.45		-1.01	
MANHOLE (0.90 mtr Dia)			-4	3.14	0.45	0.45			-2.54	
1st left Cross Road from 3rd Main Road										
	0.00	17.80	1	17.80	3.70	3.20	3.45		61.41	
2nd left Cross Road from 3rd Main Road										
	0.00	17.90	1	17.90	4.00	3.70	3.85		68.92	
Deductions										
CHAMBER			-3	0.45	0.45		0.45		-0.61	
3rd left Cross road from 3rd main										
	0.00	14.80	1	14.80	4.10	3.50	3.80		56.24	
3rd 'A' cross Road from 3rd Main Road to 14th main 1st phase										
	0.00	17.40	1	17.40	3.20	3.40	3.30		57.42	
	17.40	24.50	1	7.10	3.20	3.00	3.10		22.01	
	24.50	26.30	1	1.80						Culvert
	26.30	60.00	1	33.70	3.70	3.60	3.65		123.01	
	60.00	90.00	1	30.00	3.60	3.30	3.45		103.50	
	90.00	105.20	1	15.20	3.30	3.40	3.35		50.92	
	105.20	107.00	1	1.80						
	107.00	113.00	1	6.00						Culvert

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Chainage		Nos	L	B	B1	Avg B	D	Qty	REMARKS
Land Mark			(m)	(m)	(m)	(m)	(m)		
113.00	120.00	1	7.00	5.30	4.70	5.00		35.00	
120.00	150.00	1	30.00	4.70	4.20	4.45		133.50	
150.00	180.00	1	30.00	4.20	4.60	4.40		132.00	
180.00	210.00	1	30.00	4.60	4.10	4.35		130.50	
210.00	240.00	1	30.00	4.10	4.40	4.25		127.50	
240.00	270.00	1	30.00	4.40	3.20	3.80		114.00	
270.00	287.70	1	17.70	3.20	2.70	2.95		52.22	
287.70	300.00	1	12.30	3.80	2.30	3.05		37.52	
300.00	328.60	1	28.60	2.30	4.20	3.25		92.95	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-12	0.45	0.45		0.45		-2.43	
MANHOLE (0.90 mtr Dia)		-6	3.14	0.45	0.45			-3.82	
3rd 'B' cross Road from 3rd main to end of Road									
0.00	30.00	1	30.00	3.70	3.50	3.60		108.00	
30.00	60.00	1	30.00	3.50	4.30	3.90		117.00	
60.00	87.70	1	27.70	4.30	4.10	4.20		116.34	
87.70	88.90	1	1.20						Culvert
88.90	95.80	1	6.90						HT Cross Road
95.80	120.00	1	24.20	3.60	3.80	3.70		89.54	
120.00	150.00	1	30.00	3.80	4.00	3.90		117.00	
150.00	180.00	1	30.00	4.00	3.30	3.65		109.50	
180.00	211.80	1	31.80	3.30	3.00	3.15		100.17	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-3	0.45	0.45		0.45		-0.61	
MANHOLE (0.90 mtr Dia)		-9	3.14	0.45	0.45			-5.72	
							Total Qty	2525.04	SQM
							Qty Payable in this bill	2525.04	SQM

Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	3
Item Name:	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material, mixing in a mechanical mix plant at OMC, Carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications Clause 401 of MORTH V Revision.(I No-20.5,P No-153)

Final Measurement Date(s) : 12/07/2022; 15/07/2022; 18/07/2022

Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Adithya Nagara									
3rd Main Road from Chikkabettahalli Road to End of Road									
0.00	24.00	1	24.00	4.10	3.70	3.90	0.15	14.04	
24.00	25.20	1	1.20						New Culvert
25.20	60.00	1	34.80	3.80	3.70	3.75	0.15	19.58	
60.00	83.80	1	23.80	3.70	2.50	3.10	0.15	11.07	
83.80	99.50	1	15.70	2.50	2.50	2.50	0.15	5.89	
99.50	115.40	1	15.90	3.00	3.10	3.05	0.15	7.27	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-5	0.45	0.45		0.45	0.15	-0.15	
MANHOLE (0.90 mtr Dia)		-4	3.14	0.45	0.45		0.15	-0.38	
1st left Cross Road from 3rd Main Road									
0.00	17.80	1	17.80	3.70	3.20	3.45	0.15	9.21	
2nd left Cross Road from 3rd Main Road									
0.00	17.90	1	17.90	4.00	3.70	3.85	0.15	10.34	
Deductions									
CHAMBER		-3	0.45	0.45		0.45	0.15	-0.09	
3rd left Cross road from 3rd main									
0.00	14.80	1	14.80	4.10	3.50	3.80	0.15	8.44	
3rd 'A' cross Road from 3rd Main Road to 14th main 1st phase									
0.00	17.40	1	17.40	3.20	3.40	3.30	0.15	8.61	
17.40	24.50	1	7.10	3.20	3.00	3.10	0.15	3.30	
24.50	26.30	1	1.80						Culvert
26.30	60.00	1	33.70	3.70	3.60	3.65	0.15	18.45	
60.00	90.00	1	30.00	3.60	3.30	3.45	0.15	15.53	
90.00	105.20	1	15.20	3.30	3.40	3.35	0.15	7.64	
105.20	107.00	1	1.80						Culvert

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Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
107.00	113.00	1	6.00						High Tension Cross Road
113.00	120.00	1	7.00	5.30	4.70	5.00	0.15	5.25	
120.00	150.00	1	30.00	4.70	4.20	4.45	0.15	20.03	
150.00	180.00	1	30.00	4.20	4.60	4.40	0.15	19.80	
180.00	210.00	1	30.00	4.60	4.10	4.35	0.15	19.58	
210.00	240.00	1	30.00	4.10	4.40	4.25	0.15	19.13	
240.00	270.00	1	30.00	4.40	3.20	3.80	0.15	17.10	
270.00	287.70	1	17.70	3.20	2.70	2.95	0.15	7.83	
287.70	300.00	1	12.30	3.80	2.30	3.05	0.15	5.63	
300.00	328.60	1	28.60	2.30	4.20	3.25	0.15	13.94	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-12	0.45	0.45		0.45	0.15	-0.36	
MANHOLE (0.90 mtr Dia)		-6	3.14	0.45	0.45		0.15	-0.57	
3rd' B' cross Road from 3rd main to end of Road									
0.00	30.00	1	30.00	3.70	3.50	3.60	0.15	16.20	
30.00	60.00	1	30.00	3.50	4.30	3.90	0.15	17.55	
60.00	87.70	1	27.70	4.30	4.10	4.20	0.15	17.45	
87.70	88.90	1	1.20						Culvert
88.90	95.80	1	6.90						HT Cross Road
95.80	120.00	1	24.20	3.60	3.80	3.70	0.15	13.43	
120.00	150.00	1	30.00	3.80	4.00	3.90	0.15	17.55	
150.00	180.00	1	30.00	4.00	3.30	3.65	0.15	16.43	
180.00	211.80	1	31.80	3.30	3.00	3.15	0.15	15.03	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-3	0.45	0.45		0.45	0.15	-0.09	
MANHOLE (0.90 mtr Dia)		-9	3.14	0.45	0.45		0.15	-0.86	
							Total Qty	378.76	CUM
							Qty Payable in this bill	378.76	CUM

Contractor Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Consultant Representative

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12

Measurement Sheet

FOURTH and PART

Item No:	4
Item Name:	KSRRB M600-1 Providing and Constructing dry lean cement concrete mix CC 1:5:10 base with OPC 25mm and down size graded granite metal coarse aggregate at 0.86cum and 0.86cum and fine aggregate @0.58cum over a prepared sub-base,coarse and fine aggregate conforming to IS: 383-2016,aggregate cement ratio not to exceed 15:1.Aggregate gradation after blending to be as per Table 600-1,optimum moisture content to be determind during trial length construction,concrete strength not be determinde during trial length costruction, concrete strength not to be less than 10Mpa at 7 days,mixed in a batching plant,transported to site,laid with a paver,compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per spectications. Clause 601 of MORTH V Revision and IS 456 Table-5, with OPC at 150 kg/cum and coarse aggregate 0.86 cum,fine aggregate 0.58 cum using concrete Batch mix Plant at 75 cum/hr capacity with fixed form paver 22.1.2,Pg No.-174 .

Final Measurement Date(s) : 19/07/2022; 20/07/2022; 21/07/2022; 22/07/2022; 25/07/2022; 26/07/2022

Chainage / Land Mark		Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Adithya Nagara									
3rd Main Road from Chikkabettahalli Road to End of Road									
0.00	24.00	1	24.00	4.10	3.70	3.90	0.15	14.04	
24.00	25.20	1	1.20						New Culvert
25.20	60.00	1	34.80	3.80	3.70	3.75	0.15	19.58	
60.00	83.80	1	23.80	3.70	2.50	3.10	0.15	11.07	
83.80	99.50	1	15.70	2.50	2.50	2.50	0.15	5.89	
99.50	115.40	1	15.90	3.00	3.10	3.05	0.15	7.27	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-5	0.45	0.45		0.45	0.15	-0.15	
MANHOLE (0.90 mtr Dia)		-4	3.14	0.45	0.45		0.15	-0.38	
1st left Cross Road from 3rd Main Road									
0.00	17.80	1	17.80	3.70	3.20	3.45	0.15	9.21	
2nd left Cross Road from 3rd Main Road									
0.00	17.90	1	17.90	4.00	3.70	3.85	0.15	10.34	
Deductions									
CHAMBER		-3	0.45	0.45		0.45	0.15	-0.09	
3rd left Cross road from 3rd main									
0.00	14.80	1	14.80	4.10	3.50	3.80	0.15	8.44	

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SAPIENCE CONSULTANTS & ENGINEERS Bangalore-59

Name of Work: Restoration and Improvements of Roads From Doddaballapura ...
Collage Kaveri Layout Chowdappa Layout Maruthi...

Chainage / Land Mark	Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Deductions								
CHAMBER (0.45 x 0.45 mtr)	-3	0.45	0.45		0.45	0.15	-0.09	
MANHOLE (0.90 mtr Dia)	-9	3.14	0.45	0.45		0.15	-0.86	
						Total Qty	378.76	CUM
						Total BOQ Quantity	656.78	CUM
						Quantity Paid up to THIRD Part Bill	494.66	CUM
						Quantity Reserved for Approval of Workslip and EIRL	216.64	CUM
						Quantity Payable in this Bill	162.12	CUM

Contractor Representative

Consultant Representative

SAPIENCE CONSULTANTS & ENGINEERS

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst Executive Engineer
Yelahanka New Town Sub Division
BBMP

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Restoration and Improvements of Roads from Doddaballapura Main Road to Nagarjuna College, Kaveri Layout, Chowdappa Layout, Maruthinagara, Hariraja Layout and Surrounding Areas in Ward No - 03 of Yelahanka New Town Sub Division (PACKAGE NO -12)

Measurement Sheet

FOURTH and PART

Item No:	5
Item Name:	Constructing un-reinforced,plain cement concrete for pavements using Grade concrete M30 over a prepared base with OPC coarse aggregate at 0.69 cum,fine aggregates at 0.46 cum,coarse and fine aggregate conforming to IS:383-2016,with Superplastizer at 3 Its conforming to IS 9103-2008 mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design,laid in approved fixed side form work (sreel channel,layning and fixing of 125 micron thick polythene fim, wedges, steel plates including levelling the form work as per drawing). & Speration the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a construction and longitudinal joints,including groove cutting charges,joint filler,separation membrane of impermiable plastic sheet of 125 micron,sealant primer, joint sealant, admixtures as approved, curring compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials,labour,hire charges of machineries , all lead & lift charges etc , complete as per specifications with OPC AT 360 kg/cum and coarse aggregate 0.69,fineaggregate 0.46cum. Item No.-22.6 3,Page No.-176

Final Measurement Date(s) : 20/07/2022; 21/07/2022; 22/07/2022; 23/07/2022; 26/07/202227/07/2022

Chainage		Land Mark	Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Adithya Nagara										
3rd Main Road from Chikkabettahalli Road to End of Road										
	0.00	24.00	1	24.00	4.10	3.70	3.90	0.15	14.04	
	24.00	25.20	1	1.20						New Culvert
	25.20	60.00	1	34.80	3.80	3.70	3.75	0.15	19.58	
	60.00	83.80	1	23.80	3.70	2.50	3.10	0.15	11.07	
	83.80	89.50	1	15.70	2.50	2.50	2.50	0.15	5.89	
	99.50	115.40	1	15.90	3.00	3.10	3.05	0.15	7.27	
Reduction										
CHAMBER (0.45 x 0.45 mtr)			-5	0.45	0.45		0.45	0.15	-0.15	
MANHOLE (0.90 mtr Dia)			-4	3.14	0.45	0.45		0.15	-0.38	
1st left Cross Road from 3rd Main Road										
	0.00	17.80	1	17.80	3.70	3.20	3.45	0.15	9.21	

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Chainage		Nos	L	B	B1	Avg B	D	Qty	REMARKS
Land Mark			(m)	(m)	(m)	(m)	(m)		
2nd left Cross Road from 3rd Main Road									
0.00	17.90	1	17.90	4.00	3.70	3.85	0.15	10.34	
Deductions									
CHAMBER		-3	0.45	0.45		0.45	0.15	-0.09	
3rd left Cross road from 3rd main									
0.00	14.80	1	14.80	4.10	3.50	3.80	0.15	8.44	
3rd 'A' cross Road from 3rd Main Road to 14th main 1st phase									
0.00	17.40	1	17.40	3.20	3.40	3.30	0.15	8.61	
17.40	24.50	1	7.10	3.20	3.00	3.10	0.15	3.30	
24.50	26.30	1	1.80						Culvert
26.30	60.00	1	33.70	3.70	3.60	3.65	0.15	18.45	
60.00	90.00	1	30.00	3.60	3.30	3.45	0.15	15.53	
90.00	105.20	1	15.20	3.30	3.40	3.35	0.15	7.64	
105.20	107.00	1	1.80						Culvert
107.00	113.00	1	6.00						High Tension Cross Road
113.00	120.00	1	7.00	5.30	4.70	5.00	0.15	5.25	
120.00	150.00	1	30.00	4.70	4.20	4.45	0.15	20.03	
150.00	180.00	1	30.00	4.20	4.60	4.40	0.15	19.80	
180.00	210.00	1	30.00	4.60	4.10	4.35	0.15	19.58	
210.00	240.00	1	30.00	4.10	4.40	4.25	0.15	19.13	
240.00	270.00	1	30.00	4.40	3.20	3.80	0.15	17.10	
270.00	287.70	1	17.70	3.20	2.70	2.95	0.15	7.83	
287.70	300.00	1	12.30	3.80	2.30	3.05	0.15	5.63	
300.00	328.60	1	28.60	2.30	4.20	3.25	0.15	13.94	
Deductions									
CHAMBER (0.45 x 0.45 mtr)		-12	0.45	0.45		0.45	0.15	-0.36	
MANHOLE (0.90 mtr Dia)		-6	3.14	0.45	0.45		0.15	-0.57	
3rd' B' cross Road from 3rd main to end of Road									
0.00	30.00	1	30.00	3.70	3.50	3.60	0.15	16.20	
30.00	60.00	1	30.00	3.50	4.30	3.90	0.15	17.55	
60.00	87.70	1	27.70	4.30	4.10	4.20	0.15	17.45	
87.70	88.90	1	1.20						Culvert
88.90	95.80	1	6.90						HT Cross Road
95.80	120.00	1	24.20	3.60	3.80	3.70	0.15	13.43	
120.00	150.00	1	30.00	3.80	4.00	3.90	0.15	17.55	
150.00	180.00	1	30.00	4.00	3.30	3.65	0.15	16.43	
180.00	211.80	1	31.80	3.30	3.00	3.15	0.15	15.03	

Name of Work: Restoration and Improvements of Roads From Doddaballapura ... Collage,Kaveri Layout,Chowdappa Layout,Maruthi...

Chainage / Land Mark	Nos	L (m)	B (m)	B1 (m)	Avg B (m)	D (m)	Qty	REMARKS
Deductions								
CHAMBER (0.45 x 0.45 mtr)	-3	0.45	0.45		0.45	0.15	-0.09	
MANHOLE (0.90 mtr Dia)	-9	3.14	0.45	0.45		0.15	-0.86	
						Total Qty	378.76	CUM
						Total BOQ Quantity	656.78	CUM
						Quantity Paid up to THIRD Part Bill	494.66	CUM
						Quantity Reserved for Approval of Workslip and EIRL	216.64	CUM
						Quantity Payable in this Bill	162.12	CUM

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Contractor Representative

Consultant Representative

Asst Engineer
Yelahanka New Town Sub Division
BBMP

Asst.Executive Engineer
Yelahanka New Town Sub Division
BBMP